

R E M A R K S

This is a full and timely response to the Office Action mailed June 22, 2007.

Independent claims 1 and 8 have been amended to clarify the filter characteristics of the trim filter. Dependent claims 2 and 9 have been amended to correct the informalities noted by the Examiner.

Applicants believe that the currently pending claims are not anticipated by or obvious over the cited references for at least the reasons set forth below and respectfully request reconsideration.

Claim Rejections - 35 U.S.C. 102(b)

Claims 1, 2 and 4-6 have been rejected under 35 U.S.C. 102(b) as being anticipated by Suda, U.S. Patent No. 5,166,784. Applicants believe that the currently pending claims are allowable over Suda at least because Suda does not disclose or suggest that the "first trim filter transmission function is selected to selectively block light at edges of at least one of said first and second bands of wavelengths that is not blocked by said primary filter layer transmission function, whereby said primary filter layer and said first trim filter together have a target transmission function transmitting a desired set of wavelengths."

Suda's spectral distribution correction filter 7 is used to normalize or equalize the output signal levels for the different colors, for example, to produce the same output signal strength from each of red, green and blue sensors. See, for example, Suda col. 8, lines 25-50:

"In an original reading apparatus of FIG. 11, a spectral distribution correction filter 7 is used in place of the invisible radiation removal filter 6 in the apparatus of FIG. 1. The spectral distribution correction filter means is used in the apparatus of FIG. 11 for the following reason. The spectral sensitivity of the photosensitive transducer elements in the solid-state color image sensor varies depending on the colors of the predetermined color separation filters. The transmissivities [sic] of the color separation filters in the sensor are different from each other according to different colors. Therefore, the spectral sensitivities of the sensor are different from each other according to the visible light components. Therefore, the outputs from the sensor are different from each other according to different visible light components. **The levels of the output signals are conventionally adjusted by a plurality of amplifying means having different gains to obtain identical signal levels, thus complicating the circuit arrangement. In the apparatus of FIG. 11, a spectral distribution correction filter means is used to decrease the difference of levels of outputs from the color separation filters in the sensor, as compared with the case wherein such a filter means is not arranged.** Therefore, the circuit arrangement can be simplified and the image signals accurately corresponding to the colors of the color separation filter can be produced."

In contrast, Applicants' trim filter is used to adjust the transmission functions, the bands of wavelengths passed or transmitted, for one or more of the colors targeted by the color filter. See, for example, page 8, lines 9-11 of Applicant's specification: "The above-described embodiments

of the present invention utilize pigment filters to provide the primary color filtration function and interference filters to **adjust the edges of the pigment filter transmission curve** to more nearly match a target transmission function." Thus, Suda's spectral distribution correction filter 7 is selected to generally attenuate entire bands for a color so that the signal levels from the various different color image sensors are normalized, Applicant's claimed trim filter is used to trim the edges of the frequency bands passed by the color filter to tailor the wavelengths in the transmission function of the color filter.

Claims 2 and 4-6 depend ultimately upon independent claim 1 which is allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on an allowable independent claim. However, dependent claims 2 and 4-6 are independently allowable at least in that they recite particular features which, when combined with the elements of the independent claim, are also not disclosed or suggested in the cited references.

Claim Rejections - 35 U.S.C. 103(a)

Claims 3 and 7-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Suda. Independent claim 8 has been amended to include the same limitation with respect to the filtering characteristic of the trim filter as claim 1, and the arguments for allowability set forth above with respect to claim 1 are repeated regarding amended claim 8. Suda's filter 7 that may have a spatially constant transmission function does not have the same filter characteristics and is not used for the same purpose, that is,

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it does not trim the edges of the transmission functions for the primary filter.

Claims 3, 7 and 9-11 depend upon independent claims which are allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on allowable independent claims. However, dependent claims 3, 7 and 9-11 are independently allowable at least in that they recite particular features which, when combined with the elements of the independent claims, are also not disclosed or suggested in the cited references.

In view of the above, all of the claims are believed to be in condition for allowance, and Applicants respectfully request that a timely Notice of Allowance be issued.

Respectfully submitted,
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